

## **THE MORRIS WETLAND BANK: 2010 REPORT AND PROPOSAL FOR FUTURE MONITORING**

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### **Introduction**

The Morris Wetland Bank is located near Morris, Illinois in Grundy County and is immediately east of IL Route 47 and south of the Illinois River (Appendix 1). More information about the site can be found in the Wetland Bank Prospectus: Morris Site prepared by IDOT (Brooks 2000). As of 17 May 2004, a total of 7630 trees had been planted on 109 acres of ground slated for wetland restoration at the Morris Wetland Bank in Grundy County, Illinois (IDOT Memo from Michael L. Hine dated 21 May 2004). These trees were planted in 11 different planned wetlands (labeled A through K in Appendix 2). The first year of monitoring was conducted on 27-28 July and 20 September 2004. INHS personnel counted all live-planted trees and performed wetland determinations at each site. Since this time, the site has been monitored on the following dates: 5-6 July and 27 September 2005, 26-27 July 2006, 27-28 September and 4-5 October 2007, 15-16 October 2008. The sixth year of monitoring was conducted on 4 August and 13-14 October 2009. INHS personnel submitted annual monitoring reports to IDOT from 2004-2009 (Feist et al. 2005, Feist et al. 2006, Feist et al. 2007, Wilm et al. 2008, Feist et al. 2009, Feist et al. 2010). These reports discussed the goals, objectives, and performance criteria for the wetland bank, the methods used for monitoring the site, monitoring results, and recommendations for management of the site.

In 2009, ownership of the Morris Wetland Bank was transferred from IDOT to the Illinois Department of Natural Resources (IDNR). As a result, IDNR now allows deer hunting at the site. Archery deer hunting was ongoing at the site from 1 October 2010 to 16 January 2011. For the last several years INHS personnel have conducted monitoring of the Morris Wetland Bank in early to mid-October and planned to do so again in 2010. Unfortunately INHS found out too late that deer hunting was occurring at the site and that access to the site would be restricted after October 1st. For this reason, INHS were unable to conduct the annual monitoring of the Morris Wetland Bank in 2010. Please refer to the 2009 INHS report (Feist et al. 2010) and the 2010 ISGS report (Miner et al. 2010) for the latest information regarding this site. INHS will visit the site in September 2011 to monitor the site and thereby avoid any conflict with the IDNR and deer hunters utilizing the site. We will contact Joe Giacone of the IDNR ([joe.giacone@illinois.gov](mailto:joe.giacone@illinois.gov)) to gain access to the site.

In 2000, a Wetland Bank Prospectus (Brooks 2000) was developed for the Morris Wetland Bank detailing the goals, objectives, and performance standards for this site. Performance criteria were based on those specified in the *Corps of Engineers Wetlands Delineation*

*Manual* (Environmental Laboratory 1987) and in *Guidelines for Developing Mitigation Proposals* (USACE 1993). Each goal was to be attained by the end of a five-year monitoring period. The main goal for the project was the following:

**Project goal:** The goal of this wetland restoration project is to create one continuous tract of floodplain forest within the Morris Mitigation Bank. To this effect, 109 acres of wetland restoration area have been planted with native trees and shrubs in 11 different planned wetlands (A-K) [Appendix2].

Objectives and performance criteria for these planned wetlands were as follows:

**Objective 1:** Each planned wetland should be jurisdictional wetland as defined by current federal standards.

**Performance criteria:**

- a. Predominance of hydrophytic vegetation: More than 50% of the dominant plant species must be hydrophytic.
- b. Presence of wetland hydrology: The area must be either permanently or periodically inundated at average depths less than 2 m (6.6 ft) or have soils that are saturated to the surface for at least 5% of the growing season.
- c. Occurrence of hydric soils: Hydric soil characteristics should be present, or conditions favorable for hydric soil formation should persist at the site.

**Objective 2:** Each planned wetland should meet standards for floristic composition and vegetation cover.

**Performance criteria:**

- a. Establishment of planted trees and shrubs: At least 80% of the planted trees and shrubs should be established and living.
- b. Native species composition: At least 90% of the plants present should be non-weedy, native species.
- c. Dominance of vegetation: None of the three most dominant plant species in either site should be non-native or weedy species, such as cattails (*Typha* spp.), sandbar willow (*Salix exigua*), or reed canary grass (*Phalaris arundinacea*).

After the five-year monitoring period ended, the Corps of Engineers granted IDOT mitigation credits for the restoration of 109 acres of planned wetlands within the Morris Wetland Bank. IDOT has agreed to continue to monitor these 109 acres until the time when all mitigation credits have been used. A plan for the continued monitoring of the planned wetlands has been developed and is outlined below.

## Proposal for Future Monitoring

- 1) INHS personnel will visit the Morris Wetland Bank every third year beginning in September 2011. The percent survival of the planted trees, percent native vegetation, and the amount of area determined to be wetland at the site has been relatively stable over the past few years (Feist et al. 2010). Barring any significant disturbances to the site, this trend is expected to continue. Significant changes to vegetation often take years to develop. For these reasons, we believe that we will be able to adequately access the progress of the site by visiting the site every third year (2011, 2014, 2017, 2020, etc.).
- 2) INHS personnel will continue to conduct wetland determinations on the 109 acres of planned wetlands to monitor the progress of wetland development at the site. The performance criteria under **Objective 1** will continue to be monitored utilizing the methods as outlined in Feist et al. (2010).
- 3) The floristic composition and vegetation cover of the planned wetlands will also continue to be monitored (**Objective 2**). INHS personnel will assess the quality of the vegetation at the site. We will note any increases or decreases of native vegetation composition at the site (**performance criterion b**) and we will report on any non-native and weedy species that are dominant within the planned wetland areas (**performance criterion c**).
- 4) INHS personnel will continue to monitor tree survival within the planned wetland areas; however, we recommend that a change be made to **performance criterion a**. We recommend that instead of counting each individual tree, we visually inspect the site and report on the condition of the planted trees within the planned wetlands. We will also report on the establishment of volunteer trees within the planned wetlands.
- 5) Following the monitoring, a report summarizing our findings will be submitted to IDOT, Bureau of Design and Environment.

## Literature Cited

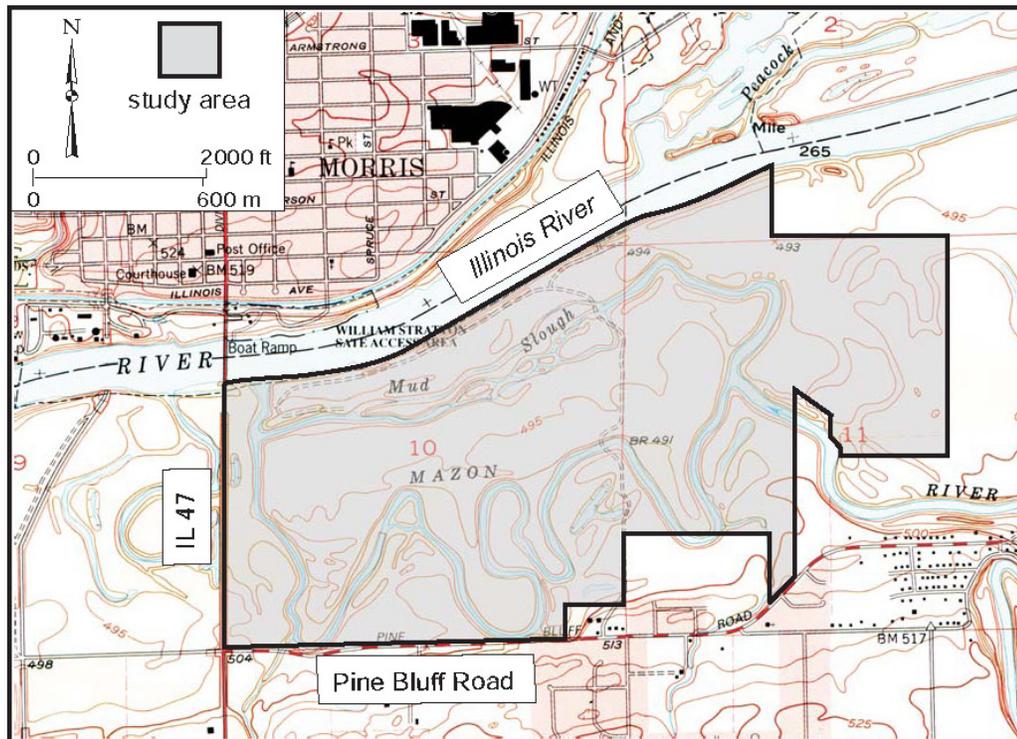
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## **APPENDIX 1**

### **Location of the Morris Mitigation Bank**

## Morris, Illinois River Wetland Bank Site General Study Area and Vicinity

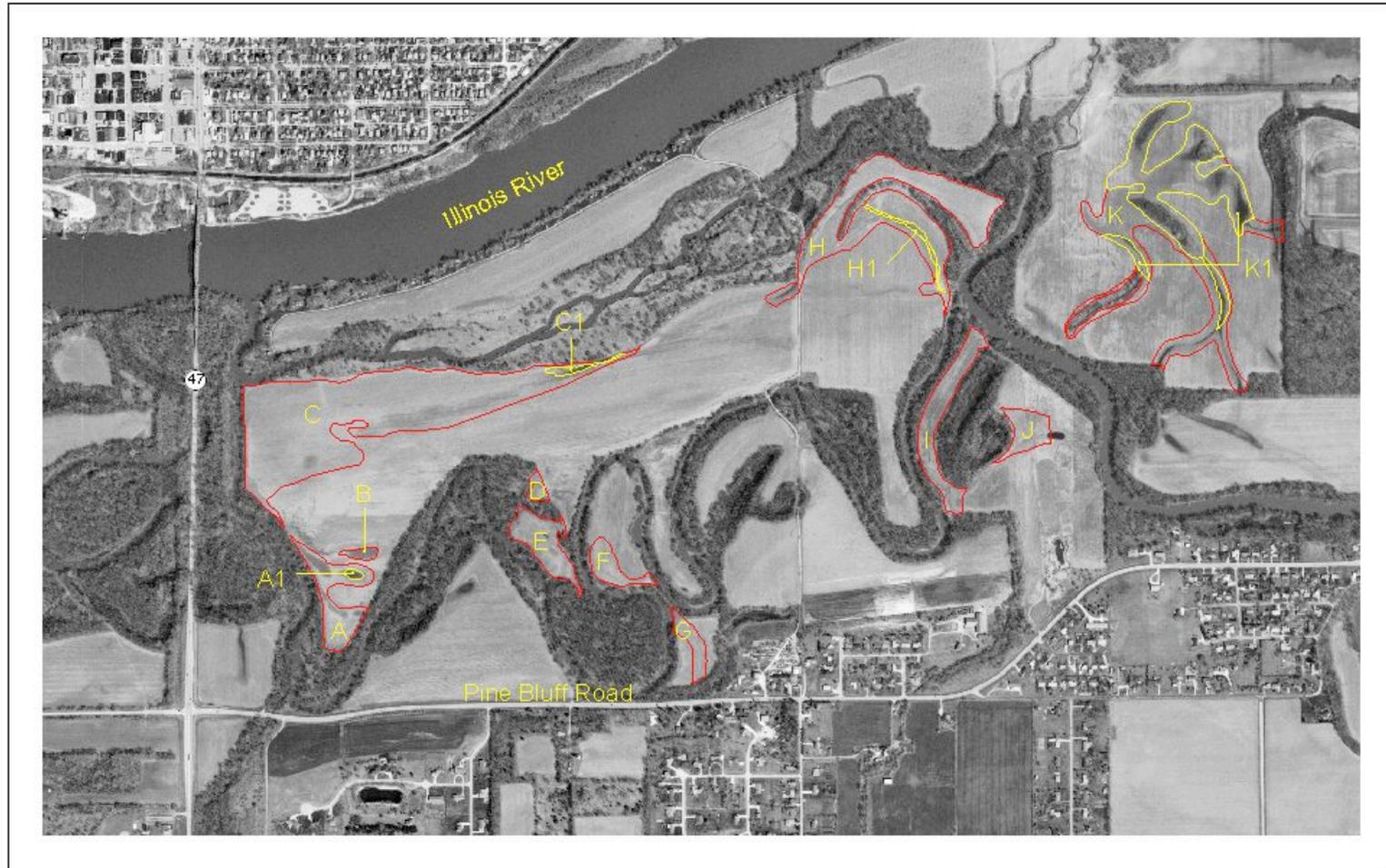
from the USGS Topographic Series, Morris, IL 7.5-minute Quadrangle (USGS 1993)  
contour interval is 5 feet



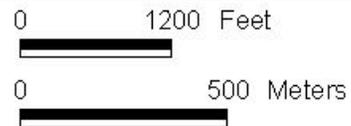
## **APPENDIX 2**

### **Locations of Planned Wetlands**

**Morris Mitigation Bank Site  
Grundy County, 2009**



Wetland sites in 2009  
Wetland restoration site



scale 1:14400  
1 inch=1200 ft

